

years.

The DSP system has proven itself many times throughout its 26 year operational life time. Originally designed to detect long range ballistic missiles, DSP proved its capability with theater class missiles by detecting and tracking Iraqi Scuds during the Desert Storm conflict. This DSP data enabled theater commanders to protect civilian population centers and coalition forces in Israel and Saudi Arabia.

In 1995, DSP was augmented again with the Attack and Launch Early Reporting to Theater (ALERT) capability and again in 1997 with the Joint Tactical Ground Station (JTACS). These systems provide vastly improved capabilities to process satellite warning data and distribute it to battlefield commanders in minimum time through efficient communication links.

-- Concept of Operation --

The DSP system consists of several satellites in geostationary orbit, an Overseas Ground Station (OGS) in Australia, a European Ground Station (EGS), a CONUS Ground Station (CGS) and Mobile Ground Terminals (MGTs). Each satellite has the capability to view nearly an entire hemisphere of the earth and can detect missile launches from any location within its field of view. The satellites use a spinning motion to sweep its infrared detector arrays across the earth's surface



DSP Flight 18 lifted off from Launch Complex 40 at Cape Canaveral aboard the Titan IVB on 23 February 1997.

to detect the hot missile plumes of boosting missiles. The data collected during these sweeps is relayed down to one of the three Air Force ground stations or MGTs around the world and then communicated to the National Command Authority or to commanders in the field. Data can



The contractor's operations center can also receive data from DSP.

also be received at the contractor's operations center. Alternately, U.S. and Allied forces deployed overseas can receive data directly from orbiting DSP satellites using the JTACS system.

-- Schedule --

DSP Flight 18 lifted off from Launch Complex 40 at Cape Canaveral on 23 February 1997. There are five more satellites in the series that are scheduled to be launched between 1997 and 2003. The new SBIRS architecture will enter service during this time with improved capabilities to ensure there won't be any gap in our nation's early warning capability into the next century.

